# BRUHATH BANGALORE MAHANAGARA PALIKE

## YELAHANKA ZONE ELECTRICAL DIVISION

**Name of the work :-** Detaild estimate for Annual Maintenance and Repairs of Electrical Installations to BBMP buildings coming under Yelahanka Constituency

**Budget Head: P0294**

Division No..... Estimate No. .....

**Est Cost Rs.** **800000.00**

| Sl. No | SR Page No | Description | Unit | Qty | Rate | Amount |
|---|---|---|---|---|---|---|
| 1 | Labour Dept | Licenced electricial wiremen with tools (Skilled) Rs.718.33/KAE 69 LMW 2022, dated 30-11-2022 Minium Wages and VDA From 01-04-2024 to 31-03-2024 | Days | 200 | 718.33 | 143666.00 |
| 2 | Labour Dept | Assistant wiremen (semiSkilled) Rs689.05/Days KAE 69 LMW 2022, dated 30-11-2022 Minium Wages and VDA From 01-04-2024 to 31-03-2024 | Days | 200 | 689.05 | 137810.00 |
| 3 | 10/3.6.1 CSR 23-24 | Supplying And fixing/replacing of 6/16/32A electrical accessories on existing switch board..6Amps SP Switch | No | 30 | 55.00 | 1650.00 |
| 4 | 9/3.6.3 CSR 23-24 | Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6Amps 6A Three Way socket | Each No | 15 | 171.00 | 2565.00 |
| 5 | 9/3.6.8 CSR 23-24 | Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.6 Amps bell push | Each No | 5 | 177.00 | 885.00 |
| 6 | 9/3.6.10 CSR 23-24 | Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293. 6/16A Universal Socket | Each No | 10 | 236.00 | 2360.00 |
| 7 | 9/3.6.7 CSR 23-24 | Supplying and fixing of modular switch & connected accessories on existing modular switch plate as per IS 3854 and IS 1293.16A One Way Switch | Each No | 10 | 180.00 | 1800.00 |
| 8 | 9/3.7 CSR 23-24 | Supplying and fixing 32A security and energy saving DP switch with key tag suitable to operate on 230 V, 50Hz AC supply & completely wired on existing box. | Each No | 10 | 646.00 | 6460.00 |
| 9 | 10/3.14.5 CSR 23-24 | Supplying And fixing/replacing of 6/16/32A electrical accessories on existing switch board.6A Bakelite Ceiling Rose | No | 10 | 78.00 | 780.00 |
| 10 | 10/3.14.16 CSR 23-24 | Supplying And fixing/replacing of 6/16/32A electrical accessories on existing switch board.Electronic stepped regulator. | No | 15 | 218.00 (281=00) | 3270.00 |
| 11 | 3/1.8.1 CSR 23-24 | Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, junction box, elbows, screws at an interval of 300mm .... etc. as required.20mm | m | 40 | 28.00 | 1120.00 |
| 12 | 3/1.8.2 CSR 23-24 | Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, junction box, elbows, screws at an interval of 300mm .... etc. as required.25mm | m | 30 | 35.00 | 1050.00 |
| 13 | 8/3.3.2 CSR 23-24 | Supplying and fixing surface/flush mounting unbreakable PVC modular box suitable for mounting modular switch plates with due groove cutting in Brick/C.C wall, including necessary rawl plugs,Machine/NF screws etc., complete.3 Way | Each | 5 | 124.00 | 620.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 14 | 8/3.3.3 CSR 23-24 | Supplying and fixing surface/flush mounting unbreakable PVC modular box suitable for mounting modular switch plates with due groove cutting in Brick/C.C wall, including necessary rawl plugs, Machine/NF screws etc., complete.4-5Way | Each | 8 | 137.00 | 1096.00 |
| 15 | 8/3.3.4 CSR 23-24 | Supplying and fixing surface/flush mounting unbreakable PVC modular box suitable for mounting modular switch plates with due groove cutting in Brick/C.C wall, including necessary rawl plugs, Machine/NF screws etc., complete.6Way | Each | 5 | 173.00 | 865.00 |
| 16 | 8/3.5.2 CSR 23-24 | Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box.3 Module | Each | 8 | 161.00 | 1288.00 |
| 17 | 8/3.5.3 CSR 23-24 | Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box.4 Module | Each | 8 | 175.00 | 1400.00 |
| 18 | 8/3.5.4 CSR 23-24 | Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box.6 Module | Each | 5 | 234.00 | 1170.00 |
| 19 | 10/3.14.1 CSR 23-24 | Supplying And fixing/replacing of 6/16/32A electrical accessories on existing switch board.6Amps one way Switch | No | 15 | 55.00 | 825.00 |
| 20 | 10/3.14.3 CSR 23-24 | Supplying And fixing/replacing of 6/16/32A electrical accessories on existing switch board.6A Three Way 5 Pin Socket | No | 8 | 70.00 | 560.00 |
| 21 | 10/3.14.16 CSR 23-24 | Supplying And fixing/replacing of 6/16/32A electrical accessories on existing switch board.Electronic stepped regulator. | No | 5 | 281.00 | 1405.00 |
| 22 | 10/3.14.15 CSR 23-24 | Supplying And fixing/replacing of 6/16/32A electrical accessories on existing switch board.16/6A combined plug and socket with control switch | No | 10 | 218.00 | 2180.00 |
| 23 | 9/3.8 CSR 23-24 | Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc., and fixing on existing wooden or metal box using N.F. screws. | $cm^2$ | 8000 | 0.41 | 3280.00 |
| 24 | 15/5.8.2 CSR 23-24 | Supplying of Switch disconnector fuse unit (TPN) HRC type (but without HRC fuses). With AC-23A duty and as per IS- 13947.100 Amps | Each | 1 | 4503.00 | 4503.00 |
| 25 | 15/5.8.4 CSR 23-24 | Supplying of Switch disconnector fuse unit (TPN) HRC type (but without HRC fuses). With AC-23A duty and as per IS- 13947.160 Amps | Each | 1 | 6299.00 | 6299.00 |
| 26 | 15/5.9.3 CSR 23-24 | Supplying and fixing HRC fuse units base on existing switch/ panel board.100 to 300 Amps | Each | 5 | 919.00 | 4595.00 |

Repeated item

| | | | | | | |
|---|---|---|---|---|---|---|
| | 16/5.14.8 CSR 23-24 | Supply and fixing of 4pole power contactor with NO/NC contacts on existing wood/panel board using necessary bolts, nuts, washers and wiring etc., complete with AC-3 Rating and as per IS-13947.120 A | Each | 2 | 22579.00 | 45158.00 |
| 28 | 17/5.15.9 CSR 23-24 | Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit in Thermal Magnetic Release. Micro processor release shall have Earth Fault as per IS-13947. (Icu=100% Ics). In 4P MCCB, all Poles should have protection for Short-Cicrcuit/Over Load.For Microprocessor MCCBS Facility for segregating Priority and Non-Priority loads must be available in the MCCB. MCCB shall be provided with double insulation (insulation between front cover and internal power circuits to avoid any accidental contact with live current carrying path with the front cover open). Multi-pole breakers shall be designed to break all the poles simultaneously and they shall have a single mechanism.FOUR POLE100Amps 25kA. | Each | 2 | 8487.00 | 16974.00 |
| 29 | 17/5.15.10 CSR 23-24 | Supplying and fixing Moulded Case Circuit Breaker (MCCB) over the existing wood/panel board using necessary screws, bolts, nuts, necessary phase separators, handle and wiring complete. Protection of Overload and Short circuit in Thermal Magnetic Release. Micro processor release shall have Earth Fault as per IS-13947. (Icu=100% Ics). In 4P MCCB, all Poles should have protection for Short-Cicrcuit/Over Load.For Microprocessor MCCBS Facility for segregating Priority and Non-Priority loads must be available in the MCCB. MCCB shall be provided with double insulation (insulation between front cover and internal power circuits to avoid any accidental contact with live current carrying path with the front cover open). Multi-pole breakers shall be designed to break all the poles simultaneously and they shall have a single mechanism.FOUR POLE 125 A 25 kA. | Each | 1 | 10341.00 | 10341.00 |
| 30 | 17/5.18.1 CSR 23-24 | Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32Amps SP | Each | 6 | 415.00 | 2490.00 |
| 31 | 17/5.18.4 CSR 23-24 | Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.6-32 Amps DP | Each | 3 | 739.00 | 2217.00 |
| 32 | 17/5.18.8 CSR 23-24 | Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898.40 Amps TPN | Each | 3 | 3044.00 | 9132.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 33 | 19/5.38 CSR 23-24 | Supplying and fixing of LED type panel board indicating lamp with required colour suitable for 230/440VAC 50 Hz 12/24V D.C. | Each | 3 | 515.00 | 1545.00 |
| 34 | 30/6.3.1 CSR 23-24 | Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374- 1979 and with double ball bearing system.48" Sweep (1200mm) Regular model | Each | 10 | 2984.00 | 29840.00 |
| 35 | 30/6.5.1 CSR 23-24 | Supplying wall mounting fan suitable to operate at single-phase 230v A.C. supply 400mm Sweep 300mm | Each | 8 | 2492.00 | 19936.00 |
| 36 | 39/9.5.9 CSR 23-24 | Supplying, installation, testing & commissioning of 12V DC, AH batteries in poly propylene container for U.P.S. Sealed maintenance free batteries.150 AH capacity | Each | 1 | 15895.00 | 15895.00 |
| 37 | 43/11.3.3 CSR 23-24 | Supplying of .....feet -PVC Batten with integrated LED tube .... W with high quality diffuser with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V@ 50/60Hz & Power factor >0.9 along with CE approved. 2 years Warranty against any manufacturing defect working under standard electrical condition.LED light fitting 1 x 4' - 36/40 W | Each | 20 | 1269.00 | 25380.00 |
| 38 | 44/11.4.3 CSR 23-24 | Supplying of recess mounting non integrated type LED down light ..... W luminaire comprising of pressure decast/ extruded aluminium housing, with spring loaded false ceiling clamps, LED of Power/COB with CCT 6500 degree K, CRI> 70%. efficacy >100 lumen per watt, 120degree beam spread, life> 25000 burning hours and Compliance to IS 10322/IEC 60598, LM 79 & LM 80. The lamp compartment is enclosed with anti glare opal diffuser which enhances the lighting level. LEDs are driven by HF electronic driver integrated in a separate control gear assembly., with PF > 0.95, power loss should < 5% of lamp wattage., short circuit & open circuit protection to be integrated in the circuit, THD less than 20%, Life as per LM 79. The operating input voltage should be between 130 to 275 volts. BIS Approved and Tested by NABL/CPRI accredited laboratory with 2 years Warranty against any manufacturing defect working under standard electrical condition.15-18W | Each | 25 | 1671.00 | 41775.00 |
| 39 | 44/11.5.3 CSR 23-24 | Supply of round/square recess/surface mounted rolling type LED Down light with .....W GU 10 LED Lamp Rib Fabricated from Die cast aluminium with white powder coated prewired to mains connector & has swiveling unit of aluminium die cast eye ball & LED Lamp position retained by circular wire spring, with Life of 25000 burning hours & 70% lumen maintenance with CRI > 80. Power Input: 220-240V @ 50/60Hz & Power factor >0.9 along with CE approved. 2 years Warranty against any manufacturing defect working under standard electrical condition LED square or round down light 15-18W | Each | 25 | 1324.00 | 33100.00 |
| 40 | 48/12.1 CSR 23-24 | Supplying and fixing one of 230 volts bell or buzzer and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws. | Each | 5 | 189.00 | 945.00 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | 48/12.2.2 CSR 23-24 | Supplying and fixing one of 230 V Ding dong bell and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws with Remote.Musical | Each | 3 | 434.00 | 1302.00 |
| 42 | 48/12.2.3 CSR 23-24 | Supplying and fixing one of 230 V Ding dong bell and a flush type bell push with gang box fixed on necessary wooden or rawl plugs using NF screws with Remote.Remote | Each | 3 | 1190.00 | 3570.00 |
| 43 | 48/12.4.3 CSR 23-24 | Rewinding a ... mm ceiling fan/after using necessary gauge annealed and insulated copper wire with necessary insulating, separators vibration arresting shellac,etc including replacement of bearings if any transportation to and from the spot to workshop inclusive of releasing the refixing.1200MM | Each | 10 | 765.00 | 7650.00 |
| 44 | 49/12.20 CSR 23-24 | Supplying and fixing of T8 36/40W Fluorescent Tube with 36W power consumption with initial lumen of 2750 (3000 deg K / 4000 deg K) with rated avg life of greater than 10000 hrs.Operating voltage range from 180V to 265V. 50Hz AC power Supply | NO. Each | 30 | 63.00 | 1890.00 |
| 45 | 50/12.23 CSR 23-24 | Supplying and fixing of 20/40 Watts heavy duty open construction Ferromagnetic copper ballast for fluorescent tubes : Supplying and fixing of 20/40 Watts heavy duty open construction Ferromagnetic copper ballast for fluorescent tubes, Class H Insulated copper wire, Vacuum impregnated high quality with Low loss silicon steel lamination operated on 240V,50Hz supply with IEC 60920 (Safety) & IEC 60921(Performance). Operating voltage range from 180V to 265V, 50Hz AC power Supply. | No | 25 | 293.00 | 7325.00 |
| 46 | 52/12.44 CSR 23-24 | Supplying & Fixing of 230 Volts 20/40 watts starter for Fluorescent Lamp | No | 40 | 30.00 | 1200.00 |
| 47 | 52/12.45 CSR 23-24 | Supplying & Fixing of 230 Volts 20/40 watts Fluorescent Lamp holder | No | 24 | 33.00 | 792.00 |
| 48 | 53/12.51.3 CSR 23-24 | Supplying & fixing LED Drivers suitable for 5700K LED fitting Indoor Fixtures. Operating voltage range from 180V to 265V, 50Hz AC power Supply 9W to 12W 5700K suitable for indoor LED fitting. | Each | 10 | 420.00 | 4200.00 |
| 49 | 53/12.51.4 CSR 23-24 | Supplying & fixing LED Drivers suitable for 5700K LED fitting Indoor Fixtures. Operating voltage range from 180V to 265V, 50Hz AC power Supply 15W to 18W 5700K suitable for indoor LED fitting. | Each | 7 | 611.00 | 4277.00 |
| 50 | 38/9.1.2 CSR 23-24 | Supplying, erecting, testing and commissioning of voltage stabilizer suitable for 170 to 270 v in put and load variation from no load to full load, with over load protection, spike suppression, operating at 00 C to 400 C. Range etc., complete.4KVA Capacity | Each | 5 | 4792.00 | 23960.00 |
| 51 | 13/32.08 CSR 2023-24 | Laying of cable in Existing Trench/GI pipe/Stone Ware/RCC Hume pipe using Wooden/Aluminum Rollers as directed by the departmental staff LT Cable 35 to 95 Sqmm | KM | 0 180 | 31139.00 | 5605 02 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 52 | 13/32.09 CSR 2023-24 | 1.1 kV, XLPE or Heat resistant PVC insulated, PVC exutruted Inner Seath Armoured LTUG Cable as per IS-1554 (Part 1) or IS-7098 Part-1, Armouring strip thickness and resistivity as per IS-3975.25 Sqmm, 35 Sqmm, 3.5 Core, (14 GI Strips - 4 x 0.8 mm) | KM | 0.180 | 154062.00 | 27731.16 |
| | | ***Total Rs*** | | | | **677732.18** |
| | | GST 18 % on Item 1 to 52 | | | | 121991.79 |
| | | Misscelleneous charges | | | | 276.03 |
| | | **TOTAL** | | | | **800000.00** |

CERTIFICATE

1. The Place was inspected and work is essential.
2. The Provision made in the estimate is adequate and are necessary.
3. The Work comes in the BBMP limit and is legitimate charges on the Corporation Funds.
4. The rates in the Estimate is based on PWD(Elec) SR of 2022-23.

Asst. Engineer (Elec)

Asst. Exe.Engineer (Elec)
Sub-Division No.
Bruhat Bangalore Mahanagara Palike

EXECUTIVE ENGINEER (ELEC)
YELAHANKA DIVISION
BRUHAT BANGALORE MAHANAGARA PALIKE

Administrative Sanction for Rs. 8.00 lakhs Rupees Eight Lakhs only is accorded under head P0294 M.and R to Electrical Installation in BBMP Buildings Schedule. Registered as EE No. 22/23-24 Subject to conditions contained in enclosed memo No. BBMP/EE/ELE/42/AS/22/23-24 Dt 30.01.2024

Executive Engineer

TECHNICALLY SANCTIONED FOR Rs. 800000/- Rupees Eight Lakhs only Under P0294 M.and R to Electrical Installation in BBMP Buildings Schedule. Registered as EE ( ) No. 03/23-24 Subject to conditions contained in enclosed memo EE ( ) No. BBMP/EE/ELE/42/AS/22-24 Dt. 30.01.2024 Estimate is Sanctioned BBMP/EE/ELE/42/TS/03/23-24 Dated 02.02.2024 Rs. 800000=00

Executive Engineer